

Name: _____

at1113exam: Expand, factor, and solve quadratics (v307)

1. Expand the following expression into standard form.

$$(8x + 5)^2$$

2. Expand the following expression into standard form.

$$(3x - 8)(3x + 8)$$

3. Expand the following expression into standard form.

$$(3x + 8)(7x + 9)$$

4. Solve the equation.

$$(6x + 5)(2x - 9) = 0$$

5. Solve the equation with factoring by grouping.

$$24x^2 + 18x + 20x + 15 = 0$$

6. Solve the equation.

$$6x^2 - 30 = 4x^2 - 3x + 5$$

7. Factor the expression.

$$49x^2 - 81$$

8. Factor the expression.

$$x^2 + 5x - 24$$